## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Inventors:

Hisao KOGA, et al.

Art Unit: 2631

Application No.:

10/780,898

Filed:

February 19, 2004

For:

RECEIVING APPARATUS AND METHOD FOR DIGITAL MULTI-CARRIER

TRANSMISSION

## INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner of Patents Washington, DC 20231

Dear Sir:

Pursuant to Rules 56 and 99, Applicants hereby call the attention of the Patent Office to the art listed on the attached Form PTO 1449. All of these references, except the Maivar article, US '539, US '256, US '398, US '246 and '610, were cited in a Partial International Search Report.

Applicants present this art so that the Patent Office may, in the first instance, determine any relevancy thereof to the presently claimed invention, see <a href="Beckman Instruments">Beckman Instruments</a>, Inc. v. Chemtronics, Inc., 439 F.2d 1369, 1380, 165 USPQ 355, 364 (5th Cir. 1970). Also see Patent Office Rules 104 and 106. Applicants respectfully request that this art be expressly considered during the prosecution of this application and made of record herein and appear among the "References Cited" on any patent to issue herefrom.

Respectfully submitted,

Date: August 6, 2004

Registration No. 28,732

JEL/ejw

ATTORNEY DOCKET NO. <u>L8612.04104</u>

STEVENS, DAVIS, MILLER & MOSHER, L.L.P.

1615 L STREET, NW, Suite 850

WASHINGTON, DC 20043-4387

Telephone: (202) 785-0100

Facsimile: (202) 408-5200

IFa

FORM PTO-1449 U.S. Department of Commerce (Rev. 4/92) Patent and Trademark Office ATTY, DOCKET NO. SERIAL NO. L8612.04104 10/780,898 INFORMATION DISCLOSURE STATEMENT BY APPLIC ON P

(Use several sheets if necessary) APPLICANT Hisao KOGA, et al. FILING DATE February 19, 2004 **GROUP** AUG O O AUA 2631 THE STATE OF THE S ATENT DOCUMENTS DOCUMENT NUMBER OF ACE EXAMINER IF APPROPRIATE DATE NAME CLASS SUBCLASS 5 8 6 7 4 7 8 02/1999 Baum et al. 8 8 6 08/2002 6 4 3 1 Strait 1 2 9 3 01/2001 Kim et al. 6 9 5 9 9 5 5 3 9 11/1999 Miller 5 3 2 2 5 6 03/2003 Miller 6 A 9 7 3 9 8 03/1996 5 Tzannes et al. 6 3 6 2 6 06/1997 5 4 Tzannes et al. 5 3 1 1 0 05/1997 6 6 Sandberg et al. FOREIGN PATENT DOCUMENTS DATE COUNTRY CLASS SUBCLASS TRANSLATION **DOCUMENT NUMBER** YES NO WO 9 5 0 0 10/1999 9 5 3 2 05/1999 0 9 1 3 9 7 EP OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) Cheong et al., "Discrete Wavelet Transforms in Multi-Carrier Modulation," IEEE Globecom, The Bridge to Global Integration, IEEE Global Telecommunications Conference, XP000801553, vol. 5, ppgs. 2794-2799, 1998. H. S. Maivar, "Signal Processing with Lapped Transforms," Artech House, Inc., ISBN 089006-467-9, ppgs. 204-217, 1992. Partial International Search Report dated June 25, 2004. DATE CONSIDERED EXAMINER